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 NEWS
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 NEWS 3
         FEB 25
                 CA/CAPLUS - Russian Agency for Patents and Trademarks
                 (ROSPATENT) added to list of core patent offices covered
 NEWS 4
         FEB 28 PATDPAFULL - New display fields provide for legal status
                 data from INPADOC
 NEWS 5
         FEB 28 BABS - Current-awareness alerts (SDIs) available
 NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded
 NEWS 7 MAR 02 GBFULL: New full-text patent database on STN
 NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
 NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded
 NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced
 NEWS
      11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
 NEWS 12 MAR 22 PATDPASPC - New patent database available
 NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags
 NEWS 14 APR 04 EPFULL enhanced with additional patent information and new
                 fields
NEWS 15 APR 04 EMBASE - Database reloaded and enhanced
 NEWS 16 APR 18 New CAS Information Use Policies available online
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
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NEWS WWW
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=> file medline, uspatful, dgene, embase, wpids, fsta, jicst, biosis
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FILE 'MEDLINE' ENTERED AT 16:43:22 ON 20 APR 2005

COST IN U.S. DOLLARS

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 16:43:22 ON 20 APR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

SINCE FILE

ENTRY

0.21

TOTAL

0.21

SESSION

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=> s alpha lactoalbumin
4 FILES SEARCHED...

L1 223 ALPHA LACTOALBUMIN

=> s alpha lactalbumin

L2 9177 ALPHA LACTALBUMIN

=> s 12 and oligomeric form

L3 14 L2 AND OLIGOMERIC FORM

=> d l3 ti abs ibib tot

L3 ANSWER 1 OF 14 USPATFULL on STN

TI Therapeutic agents

AB An agent comprising a protein complex comprising an **oligomeric** form of alpha -lactalbumin (MAL) and a

further reagent which is combined with MAL such that it is carried into the nucleoplasm of cells which are susceptible to MAL. Agents of the type, where the further reagent is a therapeutic or labelling reagent, can be used in diagnosis and therapy in particular of cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:270008 USPATFULL TITLE: Therapeutic agents

INVENTOR(S): Svanborg, Catharina, University of Lund Department of

Laboratory Medicine, Division of Clinical Immunology,

Solvegatan 23, S-223 62 Lund, SWEDEN

Hakansson, Per Anders, Flormans gatan 2A, S-223 54

Lund, SWEDEN

	NUMBER	KIND	DATE	
PATENT INFORMATION: US	6808930	B1	20041026	
WO	9927967		19990610	
APPLICATION INFO.: US	2000-555270		20000830	(9)
WO	1998-IB1920		19981123	

NUMBER DATE

PRIORITY INFORMATION: GB 1997-25126 19971127

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Caputa, Anthony C. ASSISTANT EXAMINER: Holleran, Anne L.

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.

NUMBER OF CLAIMS: 30 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 1034

ANSWER 2 OF 14 USPATFULL on STN L3

ΤI

AB

Pharmaceutical proteins, human therapeutics, human serum albumin, insulin, native cholera toxic b submitted on transgenic plastids Transgenic chloroplast technology could provide a viable solution to the production of Insulin-like Growth Factor I (IGF-I), Human Serum Albumin (HSA), or interferons (IFN) because of hyper-expression capabilities, ability to fold and process eukaryotic proteins with disulfide bridges (thereby eliminating the need for expensive post-purification processing). Tobacco is an ideal choice because of its large biomass, ease of scale-up (million seeds per plant), genetic manipulation and impending need to explore alternate uses for this hazardous crop. Therefore, all three human proteins will be expressed as follows: a) Develop recombinant DNA vectors for enhanced expression via tobacco chloroplast genomes b) generate transgenic plants c) characterize transgenic expression of proteins or fusion proteins using molecular and biochemical methods d) large scale purification of therapeutic proteins from transgenic tobacco and comparison of current purification/processing methods in E. coli or yeast e) Characterization and comparison of therapeutic proteins (yield, purity, functionality) produced in yeast or E. coli with transgenic tobacco f) animal testing and pre-clinical trials for effectiveness of the therapeutic proteins.

Mass production of affordable vaccines can be achieved by genetically engineering plants to produce recombinant proteins that are candidate vaccine antigens. The B subunits of Enteroxigenic E. coli (LTB) and cholera toxin of Vibrio cholerae (CTB) are examples of such antigens. When the native LTB gene was expressed via the tobacco nuclear genome, LTB accumulated at levels less than 0.01% of the total soluble leaf protein. Production of effective levels of LTB in plants, required extensive codon modification. Amplification of an unmodified CTB coding sequence in chloroplasts, up to 10,000 copies per cell, resulted in the accumulation of up to 4.1% of total soluble tobacco leaf protein as oligomers (about 410 fold higher expression levels than that of the unmodified LTB gene). PCR and Southern blot analyses confirmed stable integration of the CTB gene into the chloroplast genome. Western blot analysis showed that chloroplast synthesized CTB assembled into oligomers and was antigenically identical to purified native CTB. Also, GM.sub.1, -qanglioside binding assays confirmed that chloroplast synthesized CTB binds to the intestinal membrane receptor of cholera toxin, indicating correct folding and disulfide bond formation within the chloroplast. In contrast to stunted nuclear transgenic plants, chloroplast transgenic plants were morphologically indistinguishable from untransformed plants, when CTB was constitutively expressed. The introduced gene was stably inherited in the subsequent generation as confirmed by PCR and Southern blot analyses. Incrased production of an efficient transmucosal carrier molecule and delivery system, like CTB, in transgenic chloroplasts makes plant based oral vaccines and fusion proteins with CTB needing oral administration a much more practical approach.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:290101 USPATFULL

TITLE: Pharmaceutical proteins, human therapeutics, human

serum albumin, insulin, native cholera toxic b

submitted on transgenic plastids

INVENTOR(S): Daniell, Henry, Winter Park, FL, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003204864	A1	20031030	
APPLICATION INFO.:	US 2001-807742	A1	20010418	(9)
	WO 2001-US6288		20010228	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			

LEGAL REPRESENTATIVE: Schnader Harrison Segal & Lewis, IP Department 36th Floor, 1600 Market Street, Philadelphia, PA, 19103

NUMBER OF CLAIMS: 37 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 5552

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 14 USPATFULL on STN

TI Method of processing a proteinaceous material to recover K-casein

macropeptide and polymers of a-lactalbumin and B-lactoglobulin

AB A method of processing a proteinaceous material that includes κ -casein macropeptide, the method entailing polymerizing protein present in the proteinaceous material to yield a proteinaceous

intermediate, where the proteinaceous intermediate includes polymerized protein, and separating the proteinaceous intermediate to yield a first

portion and a second portion, where the first portion includes a majority of the κ -casein macropeptide from the proteinaceous

material and the second portion includes a majority of the polymerized

protein from the proteinaceous intermediate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:238708 USPATFULL

TITLE: Method of processing a proteinaceous material to

recover K-casein macropeptide and polymers of

a-lactalbumin and B-lactoglobulin

INVENTOR(S): Brody, Ernest P., Minneapolis, MN, UNITED STATES

PATENT ASSIGNEE(S): Land O' Lakes, Inc., Arden Hills, MN, UNITED STATES,

55112 (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003166866 A1 20030904 APPLICATION INFO.: US 2002-58907 A1 20020128 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KINNEY & LANGE, P.A., THE KINNEY & LANGE BUILDING, 312

SOUTH THIRD STREET, MINNEAPOLIS, MN, 55415-1002

NUMBER OF CLAIMS: 60 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 23 Drawing Page(s)

LINE COUNT: 4272

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 14 USPATFULL on STN

TI Polypeptides having L-asparaginase activity

Disclosed are polypeptides which originate from mammal, having L-asparaginase activity. The polypeptides are easily prepared by applying recombinant DNA techniques to DNAs encoding the polypeptides and they exert satisfactory effects in the treatment and/or the prevention for diseases caused by tumor cells dependent on L-asparagine, and cause no substantial serious side effects even when administered to humans in relatively-high dose.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:81452 USPATFULL

TITLE: Polypeptides having L-asparaginase activity

INVENTOR(S): Ario, Takeshi, Okayama, JAPAN

Taniai, Madoka, Okayama, JAPAN Yamamoto, Kozo, Okayama, JAPAN Kurimoto, Masashi, Okayama, JAPAN

PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo,

Okayama, JAPAN (non-U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: JP 1996-168172 19960607

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nashed, Nashaat T.
LEGAL REPRESENTATIVE: Browdy And Neimark

NUMBER OF CLAIMS: 5 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 2434

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 14 USPATFULL on STN

TI Polypeptides having L-asparaginase activity

Disclosed are polypeptides which originate from mammal, having L-asparaginase activity. The polypeptides are easily prepared by applying recombinant DNA techniques to DNAs encoding the polypeptides and they exert satisfactory effects in the treatment and/or the prevention for diseases caused by tumor cells dependent on L-asparagine, and cause no substantial serious side effects even when administered to humans in relatively-high dose.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:209110 USPATFULL

TITLE: Polypeptides having L-asparaginase activity

INVENTOR(S): Ario, Takeshi, Okayama, JAPAN
Taniai, Madoka, Okayama, JAPAN
Yamamoto, Kozo, Okayama, JAPAN

Kurimoto, Masashi, Okayama, JAPAN

PATENT ASSIGNEE(S): Kabushiki Kajaba Hayashibara Sajbutsu Kagaku

PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo,

JAPAN (non-U.S. corporation)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-869927, filed on 5 Jun

1997

NUMBER DATE
PRIORITY INFORMATION: JP 1996-168172 19960607

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED

FILE SEGMENT: GRANTED PRIMARY EXAMINER: Nashed, Nashaat T.

LEGAL REPRESENTATIVE: Browdy and Neimark, P.L.L.C.

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 2483

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 14 DGENE COPYRIGHT 2005 The Thomson Corp on STN

TI Production of oligomeric alpha-lactalbumin useful for

inducing apoptosis in tumour cells

AN AAY18042 peptide DGENE

AB This sequence represents the N-terminus of a fragment of the human multimeric alpha-lactalbumin (MAL). The invention relates to a method of producing a biologically active oligomeric form of alpha-lactalbumin (aLA) comprises

oligomerising and stabilising aLA in the molten globule-like state. The oligomeric aLA is able to induce apoptosis in tumour cells and/or has a bactericidal effect not seen with monomeric aLA.

ACCESSION NUMBER: AAY18042 peptide DGENE

TITLE: Production of oligomeric alpha-lactalbumin

useful for inducing apoptosis in tumour cells

INVENTOR: Hakansson P A; Svanborg C; Svensson M W

PATENT ASSIGNEE: (HAKA-I) HAKANSSON P A.

```
(SVAN-I)
                  SVANBORG C.
      (SVEN-I)
                  SVENSSON M W.
                                                              49
PATENT INFO:
                  WO 9926979
                                  A1 19990603
APPLICATION INFO: WO 1998-IB1919
                                       19981123
PRIORITY INFO:
                  GB 1998-12202
                                       19980605
                  GB 1997-24725
                                       19971121
DOCUMENT TYPE:
                  Patent
LANGUAGE:
                  English
OTHER SOURCE:
                  1999-357815 [30]
DESCRIPTION:
                  Multimeric alpha-lactalbumin 30 kD
                  protein N-terminal fragment.
L3
      ANSWER 7 OF 14 DGENE COPYRIGHT 2005 The Thomson Corp on STN
      Production of oligomeric alpha-lactalbumin useful for
TT
      inducing apoptosis in tumour cells
AN
      AAY18041 peptide
                              DGENE
AB
      This sequence represents the N-terminus of a fragment of the human
      multimeric alpha-lactalbumin (MAL). The invention
      relates to a method of producing a biologically active oligomeric
      form of alpha-lactalbumin (aLA) comprises
      oligomerising and stabilising aLA in the molten globule-like state. The
      oligomeric aLA is able to induce apoptosis in tumour cells and/or has a
      bactericidal effect not seen with monomeric aLA.
ACCESSION NUMBER: AAY18041 peptide
                  Production of oligomeric alpha-lactalbumin
TITLE:
                  useful for inducing apoptosis in tumour cells
INVENTOR:
                  Hakansson P A; Svanborg C; Svensson M W
                  (HAKA-I) HAKANSSON P A.
PATENT ASSIGNEE:
      (SVAN-I)
                  SVANBORG C.
      (SVEN-I)
                  SVENSSON M W.
                                                              49
PATENT INFO:
                  WO 9926979
                                  A1 19990603
APPLICATION INFO: WO 1998-IB1919
                                  19981123
                  GB 1998-12202
PRIORITY INFO:
                                       19980605
                  GB 1997-24725
                                       19971121
DOCUMENT TYPE:
                  Patent
LANGUAGE:
                  English
OTHER SOURCE:
                  1999-357815 [30]
DESCRIPTION:
                  Multimeric alpha-lactalbumin 14 kD
                  protein N-terminal fragment.
L3
      ANSWER 8 OF 14 DGENE COPYRIGHT 2005 The Thomson Corp on STN
ΤI
      Production of oligomeric alpha-lactalbumin useful for
      inducing apoptosis in tumour cells
AN
      AAY18040 peptide
                              DGENE
AB
      This sequence represents the N-terminus of human alpha-
      lactalbumin. The invention relates to a method of producing a
      biologically active oligomeric form of alpha
      -lactalbumin (aLA) comprises oligomerising and stabilising aLA
      in the molten globule-like state. The oligomeric aLA is able to induce
      apoptosis in tumour cells and/or has a bactericidal effect not seen with
      monomeric aLA.
ACCESSION NUMBER: AAY18040 peptide
                                          DGENE
TITLE:
                  Production of oligomeric alpha-lactalbumin
                  useful for inducing apoptosis in tumour cells
INVENTOR:
                  Hakansson P A; Svanborg C; Svensson M W
PATENT ASSIGNEE:
                  (HAKA-I) HAKANSSON P A.
      (SVAN-I)
                  SVANBORG C.
      (SVEN-I)
                  SVENSSON M W.
PATENT INFO:
                  WO 9926979
                                  A1 19990603
                                                              49
APPLICATION INFO: WO 1998-IB1919
                                       19981123
PRIORITY INFO:
                  GB 1998-12202
                                       19980605
                  GB 1997-24725
                                       19971121
DOCUMENT TYPE:
```

1999-357815 [30] OTHER SOURCE: DESCRIPTION: Human alpha-lactalbumin N-terminal fragment.

Patent

English

LANGUAGE:

```
ANSWER 9 OF 14 DGENE COPYRIGHT 2005 The Thomson Corp on STN
L3
TI
      Production of oligomeric alpha-lactalbumin useful for
      inducing apoptosis in tumour cells
AN
      AAY18045 peptide
                              DGENE
AB
      This sequence represents the N-terminus of a fragment of the human
      multimeric alpha-lactalbumin (MAL). The invention
      relates to a method of producing a biologically active oligomeric
      form of alpha-lactalbumin (aLA) comprises
      oligomerising and stabilising aLA in the molten globule-like state. The
      oligomeric aLA is able to induce apoptosis in tumour cells and/or has a
      bactericidal effect not seen with monomeric aLA.
ACCESSION NUMBER: AAY18045 peptide
                                          DGENE
                  Production of oligomeric alpha-lactalbumin
TITLE:
                  useful for inducing apoptosis in tumour cells
INVENTOR:
                  Hakansson P A; Svanborg C; Svensson M W
PATENT ASSIGNEE: (HAKA-I) HAKANSSON P A.
      (SVAN-I)
                  SVANBORG C.
      (SVEN-I)
                  SVENSSON M W.
PATENT INFO:
                  WO 9926979
                                  A1 19990603
                                                              49
APPLICATION INFO: WO 1998-IB1919
                                       19981123
PRIORITY INFO:
                  GB 1998-12202
                                       19980605
                  GB 1997-24725
                                       19971121
DOCUMENT TYPE:
                  Patent
LANGUAGE:
                  English
OTHER SOURCE:
                  1999-357815 [30]
DESCRIPTION:
                  Multimeric alpha-lactalbumin protein
                  N-terminal fragment.
      ANSWER 10 OF 14 DGENE COPYRIGHT 2005 The Thomson Corp on STN
L3
ΤI
      Production of oligomeric alpha-lactalbumin useful for
      inducing apoptosis in tumour cells
AN
      AAY18044 peptide
                              DGENE
AΒ
      This sequence represents the N-terminus of a fragment of the human
      multimeric alpha-lactalbumin (MAL). The invention
      relates to a method of producing a biologically active oligomeric
      form of alpha-lactalbumin (aLA) comprises
      oligomerising and stabilising aLA in the molten globule-like state. The
      oligomeric aLA is able to induce apoptosis in tumour cells and/or has a
      bactericidal effect not seen with monomeric aLA.
ACCESSION NUMBER: AAY18044 peptide
                  Production of oligomeric alpha-lactalbumin
TITLE:
                  useful for inducing apoptosis in tumour cells
INVENTOR:
                  Hakansson P A; Svanborg C; Svensson M W
PATENT ASSIGNEE: (HAKA-I) HAKANSSON P A.
      (SVAN-I)
                  SVANBORG C.
      (SVEN-I)
                  SVENSSON M W.
PATENT INFO:
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APPLICATION INFO: WO 1998-IB1919
                                       19981123
PRIORITY INFO:
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                                       19980605
                  GB 1997-24725
                                       19971121
DOCUMENT TYPE:
                  Patent
LANGUAGE:
                  English
OTHER SOURCE:
                  1999-357815 [30]
DESCRIPTION:
                  Multimeric alpha-lactalbumin 100 kD
                  protein N-terminal fragment.
L3
      ANSWER 11 OF 14 DGENE COPYRIGHT 2005 The Thomson Corp on STN
ΤI
      Production of oligomeric alpha-lactalbumin useful for
      inducing apoptosis in tumour cells
AN
      AAY18043 peptide
                              DGENE
AB
      This sequence represents the N-terminus of a fragment of the human
      multimeric alpha-lactalbumin (MAL). The invention
      relates to a method of producing a biologically active oligomeric
      form of alpha-lactalbumin (aLA) comprises
      oligomerising and stabilising aLA in the molten globule-like state. The
      oligomeric aLA is able to induce apoptosis in tumour cells and/or has a
      bactericidal effect not seen with monomeric aLA.
ACCESSION NUMBER: AAY18043 peptide
                                          DGENE
```

TITLE: Production of oligomeric alpha-lactalbumin

useful for inducing apoptosis in tumour cells

INVENTOR: Hakansson P A; Svanborg C; Svensson M W PATENT ASSIGNEE: (HAKA-I) HAKANSSON P A.

(SVAN-I) SVANBORG C.

(SVEN-I) SVENSSON M W.

PATENT INFO: WO 9926979 A1 19990603 49

APPLICATION INFO: WO 1998-IB1919 19981123 PRIORITY INFO: GB 1998-12202 19980605 GB 1997-24725 19971121

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1999-357815 [30]

DESCRIPTION: Multimeric alpha-lactalbumin 60 kD

protein N-terminal fragment.

L3 ANSWER 12 OF 14 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI An agent for transporting alpha-lactalbumin into

cancer cells.

AN 1999-371026 [31] WPIDS

AB WO 9927967 A UPAB: 19990806

NOVELTY - An agent (A) comprising a protein complex comprising an oligomeric form of alpha -lactalbumin

(MAL) and a further reagent (I), which is combined with MAL such that it is carried into the nucleoplasm of cells which are susceptible to MAL.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a method of treating cancer which comprises administering to cancer cells, a pharmaceutical composition (A) comprising a carrier or excipient; and
- (2) a method of diagnosing cancer which method comprises applying to cells which are suspected of being cancerous, (A) and observing penetration of the agent into the nucleus of these cells.

 \mbox{USE} - (A) is used in the treatment or in vitro diagnosis of cancer (claimed).

Dwg.0/0

ACCESSION NUMBER: 1999-371026 [31] WPIDS

DOC. NO. CPI: C1999-109521

TITLE: An agent for transporting alpha-

lactalbumin into cancer cells.

DERWENT CLASS: B04 D16 K08

INVENTOR(S): HAKANSSON, PA; SVANBORG, C

PATENT ASSIGNEE(S): (HAKA-I) HAKANSSON P A; (SVAN-I) SVANBORG C

COUNTRY COUNT: 8

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 9927967	A1 19990610	(199931)*	EN 4	18

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG

EN

US UZ VN YU ZW

AU 9911710 A 19990616 (199945) EP 1032426 A1 20000906 (200044)

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

JP 2001524535 W 20011204 (200203) 48

US 6808930 B1 20041026 (200470)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9927967	A1	WO 1998-IB1920	19981123
AU 9911710 EP 1032426	A A1	AU 1999-11710 EP 1998-954689	19981123 19981123

		WO 1998-IB1920	19981123
JP 2001524535	W	WO 1998-IB1920	19981123
		JP 2000-522952	19981123
US 6808930	B1	WO 1998-IB1920	19981123
		US 2000-555270	20000830

FILING DETAILS:

ΔR

PATENT NO	KIND	PATENT NO
AU 9911710	A Based on	WO 9927967
EP 1032426	Al Based on	WO 9927967
JP 2001524535	W Based on	WO 9927967
US 6808930	Bl Based on	WO 9927967

PRIORITY APPLN. INFO: GB 1997-25126 19971127

L3 ANSWER 13 OF 14 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Production of oligomeric alpha-lactalbumin useful for

inducing apoptosis in tumor cells.

AN 1999-357815 [30] WPIDS

WO 9926979 A UPAB: 19990802

NOVELTY - A new method (M1) of producing a biologically active

oligomeric form of alpha -lactalbumin

(aLA) comprises oligomerising and stabilizing aLA in the molten globule-like state.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a method for producing an **oligomeric form** of aLA which comprises exposing a source of aLA to an ion exchange medium which has been pre-treated with casein or an active component and recovering aLA in an **oligomeric form**;
- (2) an ion exchange medium for use in the above methods, where the medium has been treated with casein or its active components;
- (3) an ion exchange column comprising the ion exchange medium of (2); and
- (4) an **oligomeric form** of aLA obtained by a method as in (M1) or (1).

USE - The oligomeric aLA is able to induce apoptosis in tumor cells and/or has a bactericidal effect not seen with monomeric aLA. ${\rm Dwg.}\,0/8$

ACCESSION NUMBER:

1999-357815 [30] WPIDS

DOC. NO. CPI:

C1999-105891

TITLE:

Production of oligomeric alpha-

lactalbumin useful for inducing apoptosis in

tumor cells.

DERWENT CLASS:

B04 D16

INVENTOR(S):

HAKANSSON, PA; SVANBORG, C; SVENSSON, MW

PATENT ASSIGNEE(S):

(HAKA-I) HAKANSSON P A; (SVAN-I) SVANBORG C; (SVEN-I)

SVENSSON M W

COUNTRY COUNT:

83

PATENT INFORMATION:

PAC	TENT	ЙО			KII	I QI	DATE	3	V	VEE	K		LΑ]	PG								
WO	992	6979	· 9		A1	199	9906	503	(19	9993	30)	* E1	 J	48	-								
	RW:	AT	BE	CH	CY	DE	DK	EΑ	ES	FI	FR	GB	GH	GM	GR	ΙE	ΙT	KE	LS	LU	MC	MW	NL
		OA	PT	SD	SE	SZ	UG	ZW															
	₩:	AL	ΑM	AT	AU	ΑZ	BA	BB	BG	ВŔ	BY	CA	CH	CN	CU	CZ	DE	DK	EE	ES	FI	GB	GE
		GH	GM	HR	HU	ID	IL	IS	JР	ΚE	KG	ΚP	KR	ΚZ	LC	LK	LR	LS	LT	LU	LV	MD	MG
		MK	MN	MW	MX	NO	NZ	PL	PT	RO	RU	SD	SE	SG	SI	SK	SL	TJ	TM	TR	TT	UA	UG
		US	UZ	VN	ΥU	ZW																	
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PATENT NO	KIND	APPLICATION	DATE
WO 9926979	A1	 WO 1998-IB1919	19981123
AU 9912541		AU 1999-12541	19981123
EP 1032596	A A1	AU 1999-12541 EP 1998-955823	19981123
EP 1032396	AI	WO 1998-IB1919	19981123
JP 2001524491	W	WO 1998-IB1919	19981123
01 2001301131		JP 2000-522135	19981123

FILING DETAILS:

PAT	TENT NO	KII	ND			PATENT NO	
EP	9912541 1032596 2001524491	A1	Based Based Based	on	WO	9926979 9926979 9926979	

PRIORITY APPLN. INFO: GB 1998-12202 19980605; GB 1997-24725 19971121

L3 ANSWER 14 OF 14 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Therapeutic agents.

AB An agent comprising a protein complex comprising an oligomeric form of alpha-lactalbumin (MAL) and a further reagent which is combined with MAL such that it is carried into the nucleoplasm of cells which are susceptible to MAL. Agents of the type, where the further reagent is a therapeutic or labelling reagent, can be

used in diagnosis and therapy in particular of cancer.

ACCESSION NUMBER: 2005:12196 BIOSIS

DOCUMENT NUMBER: PREV200500019781

TITLE: Therapeutic agents.

AUTHOR(S): Svanborg, Catharina [Inventor, Reprint Author]; Hakansson,

Per Anders [Inventor]

CORPORATE SOURCE: University of Lund Department of Laboratory Medicine,

Division of Clinical Immunology, Solvegatan 23, S-223 62

Lund, Sweden

PATENT INFORMATION: US 6808930 October 26, 2004

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Oct 26 2004) Vol. 1287, No. 4. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 22 Dec 2004

Last Updated on STN: 22 Dec 2004

=> d his

(FILE 'HOME' ENTERED AT 16:42:54 ON 20 APR 2005)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS, BIOSIS' ENTERED AT 16:43:22 ON 20 APR 2005

L1 223 S ALPHA LACTOALBUMIN L2 9177 S ALPHA LACTALBUMIN L3 14 S L2 AND OLIGOMERIC FORM

=> s 12 and fatty acid
5 FILES SEARCHED...

L4 401 L2 AND FATTY ACID

=> s 14 and molten globule

L5 7 L4 AND MOLTEN GLOBULE

=> d l5 ti abs ibib tot

L5ANSWER 1 OF 7 MEDLINE on STN

Conformation-dependent interaction of alpha-lactalbumin with model and biological membranes: a spin-label ESR study.

Alpha-lactalbumin (alpha-LA) is biosynthesized and stored at the smooth endoplasmic reticulum (ER), then transferred to the Golgi lumen when prolactin stimulation of lactose biosynthesis and secretion takes place. Because both environments are composed of membranes, it was of interest to examine the interactions of alpha-LA with relevant model and biological membranes. Using the ESR spin-labeled fatty acid analog 5-doxyl stearic acid, we found evidence reflecting the insertion of "acid-shocked" molten globule (MG) alpha-LA into lecithin or phosphatidylserine (PS) multi-lamellar vesicles. An additional approximately 3 G immobilization was observed in the alpha-LA-lecithin sample versus the lipid alone. With PS, the increased immobilization was almost 6 G, reflecting an enhanced effect caused by strong electrostatic interactions between the positively charged protein with the negatively charged headgroup at pH 2.4. This was also reflected in the broadening of the PS:alpha-LA phase transition. Additionally, we have demonstrated that alpha-LA in its apo-form also shows similar insertion characteristics with both model and natural lipid membranes. Upon addition of calcium, the apo-form is released from the membrane as the Ca(2+)-bound protein.

ACCESSION NUMBER: 2004216985 MEDLINE PubMed ID: 15115187 DOCUMENT NUMBER:

TITLE: Conformation-dependent interaction of alpha-

lactalbumin with model and biological membranes: a

spin-label ESR study.

Chaudhuri Dipankar; Narayan Mahesh; Berliner Lawrence J AUTHOR: CORPORATE SOURCE: Department of Chemistry & Biochemistry, University of

Denver, 2190 E. Iliff Avenue, Denver, CO 80208-2436, USA.

CONTRACT NUMBER: GM 56970 (NIGMS)

Protein J, (2004 Jan) 23 (1) 95-101. SOURCE:

Journal code: 101212092. ISSN: 1572-3887.

Netherlands PUB. COUNTRY:

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200411

Entered STN: 20040430 ENTRY DATE:

Last Updated on STN: 20041219 Entered Medline: 20041124

MEDLINE on STN L5 ANSWER 2 OF 7

ΤI Lipids as cofactors in protein folding: stereo-specific lipid-protein interactions are required to form HAMLET (human alphalactalbumin made lethal to tumor cells).

AΒ Proteins can adjust their structure and function in response to shifting environments. Functional diversity is created not only by the sequence but by changes in tertiary structure. Here we present evidence that lipid cofactors may enable otherwise unstable protein folding variants to maintain their conformation and to form novel, biologically active complexes. We have identified unsaturated C18 fatty acids in the cis conformation as the cofactors that bind apo alpha-

lactalbumin and form HAMLET (human alpha-

lactalbumin made lethal to tumor cells). The complexes were formed on an ion exchange column, were stable in a molten globule-like conformation, and had attained the novel biological activity. The protein-fatty acid interaction was specific, as saturated C18 fatty acids, or unsaturated C18:1trans conformers were unable to form complexes with apo alphalactalbumin, as were fatty acids with shorter or longer carbon chains. Unsaturated cis fatty acids other than C18:1:9cis were able to form stable complexes, but these were not active in the apoptosis assay. The results demonstrate that stereo-specific lipid-protein interactions can stabilize partially unfolded conformations and form molecular complexes with novel biological activity. The results offer a new mechanism for the functional diversity of proteins, by exploiting lipids as essential, tissue-specific cofactors in this process.

ACCESSION NUMBER: 2003548969 MEDLINE DOCUMENT NUMBER: PubMed ID: 14627740

Lipids as cofactors in protein folding: stereo-specific TITLE: lipid-protein interactions are required to form HAMLET

(human alpha-lactalbumin made lethal to

tumor cells).

AUTHOR: Svensson Malin; Mossberg Ann-Kristin; Pettersson Jenny;

Linse Sara; Svanborg Catharina

Department of Microbiology, Immunology and Glycobiology CORPORATE SOURCE:

(MIG), Institute of Laboratory Medicine, Lund University,

Lund, Sweden.

Protein science : a publication of the Protein Society, SOURCE:

(2003 Dec) 12 (12) 2805-14.

Journal code: 9211750. ISSN: 0961-8368.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200407

ENTRY DATE: Entered STN: 20031121

> Last Updated on STN: 20040715 Entered Medline: 20040714

ANSWER 3 OF 7 USPATFULL on STN L5

Therapeutic agents TI

An agent comprising a protein complex comprising an oligomeric form of . AB

alpha.-lactalbumin (MAL) and a further reagent which

is combined with MAL such that it is carried into the nucleoplasm of cells which are susceptible to MAL. Agents of the type, where the further reagent is a therapeutic or labelling reagent, can be used in

diagnosis and therapy in particular of cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:270008 USPATFULL TITLE: Therapeutic agents

INVENTOR(S): Svanborg, Catharina, University of Lund Department of

Laboratory Medicine, Division of Clinical Immunology,

Solvegatan 23, S-223 62 Lund, SWEDEN

Hakansson, Per Anders, Flormans gatan 2A, S-223 54

Lund, SWEDEN

NUMBER KIND DATE US 6808930 WO 9927967 PATENT INFORMATION: B1 20041026 19990610 APPLICATION INFO.: US 2000-555270 20000830 (9) WO 1998-IB1920 19981123

> NUMBER DATE -----GB 1997-25126 19971127

PRIORITY INFORMATION: DOCUMENT TYPE:

Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Caputa, Anthony C. ASSISTANT EXAMINER: Holleran, Anne L.

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.

NUMBER OF CLAIMS: 30 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 1034

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 7 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.

ΤI Lipids as cofactors in protein folding: Stereo-specific lipid-protein interactions are required to form HAMLET (human .alpha.lactalbumin made lethal to tumor cells).

AB Proteins can adjust their structure and function in response to shifting

environments. Functional diversity is created not only by the sequence but by changes in tertiary structure. Here we present evidence that lipid cofactors may enable otherwise unstable protein folding variants to maintain their conformation and to form novel, biologically active complexes. We have identified unsaturated C18 fatty acids in the cis conformation as the cofactors that bind apo .alpha .-

lactalbumin and form HAMLET (human .alpha .-

lactalbumin made lethal to tumor cells). The complexes were formed on an ion exchange column, were stable in a molten globule-like conformation, and had attained the novel biological activity. The protein-fatty acid interaction was specific, as saturated C 18 fatty acids, or unsaturated C18: 1trans conformers were unable to form complexes with apo .alpha .lactalbumin, as were fatty acids with shorter or longer carbon

chains. Unsaturated cis fatty acids other than C18:1:9cis were able to form stable complexes, but these were not active in the apoptosis assay. The results demonstrate that stereo-specific lipid-protein interactions can stabilize partially unfolded conformations and form molecular complexes with novel biological activity. The results offer a new mechanism for the functional diversity of proteins, by exploiting lipids

as essential, tissue-specific cofactors in this process.

ACCESSION NUMBER: 2003479532 EMBASE

Lipids as cofactors in protein folding: Stereo-specific TITLE:

lipid-protein interactions are required to form HAMLET

(human .alpha.-lactalbumin made lethal

to tumor cells).

Svensson M.; Mossberg A.-K.; Pettersson J.; Linse S.; AUTHOR:

Svanborg C.

C. Svanborg, Dept. Microbiol./Immunol./Glycobiol., CORPORATE SOURCE:

Institute of Laboratory Medicine, Lund University,

Solvegatan 23, S-223 62 Lund, Sweden.

Catharina.Svanborg@mig.lu.se

SOURCE: Protein Science, (2003) Vol. 12, No. 12, pp. 2805-2814.

Refs: 30

ISSN: 0961-8368 CODEN: PRCIEI

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

Entered STN: 20031211 ENTRY DATE:

Last Updated on STN: 20031211

L5 ANSWER 5 OF 7 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

Production of oligomeric alpha-lactalbumin useful for ТT inducing apoptosis in tumor cells.

1999-357815 [30] ΑN WPIDS

9926979 A UPAB: 19990802 AΒ

NOVELTY - A new method (M1) of producing a biologically active oligomeric form of alpha -lactalbumin (aLA) comprises

oligomerising and stabilizing aLA in the molten globule -like state.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a method for producing an oligomeric form of aLA which comprises exposing a source of aLA to an ion exchange medium which has been pre-treated with casein or an active component and recovering aLA in an oligomeric form;
- (2) an ion exchange medium for use in the above methods, where the medium has been treated with casein or its active components;
- (3) an ion exchange column comprising the ion exchange medium of (2);
- (4) an oligomeric form of aLA obtained by a method as in (M1) or (1). USE - The oligomeric aLA is able to induce apoptosis in tumor cells and/or has a bactericidal effect not seen with monomeric aLA. Dwq.0/8

ACCESSION NUMBER:

1999-357815 [30] WPIDS

DOC. NO. CPI: C1999-105891 TITLE: Production of oligomeric alpha-

lactalbumin useful for inducing apoptosis in

tumor cells.

DERWENT CLASS:

B04 D16

83

HAKANSSON, PA; SVANBORG, C; SVENSSON, MW INVENTOR(S):

PATENT ASSIGNEE(S): (HAKA-I) HAKANSSON P A; (SVAN-I) SVANBORG C; (SVEN-I)

SVENSSON M W

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 9926979 A1 19990603 (199930) * EN 48

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG

US UZ VN YU ZW

AU 9912541 A 19990615 (199944) EP 1032596 A1 20000906 (200044) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

JP 2001524491 W 20011204 (200203) 53

APPLICATION DETAILS:

PAT	ENT NO	KIND	A	PPLICATION	DATE
 WO	9926979	À1	wo	1998-IB1919	 19981123
AU	9912541	А	AU	1999-12541	19981123
EP	1032596	A1	EP	1998-955823	19981123
			WO	1998-IB1919	19981123
JΡ	2001524491	W	WO	1998-IB1919	19981123
			JΡ	2000-522135	19981123

FILING DETAILS:

PAT	ENT NO	KI	ND		I	PATENT NO
AU	9912541	A	Based	on	WO	9926979
EP	1032596	A1	Based	on	WO	9926979
JP :	2001524491	W	Based	on	WO	9926979

PRIORITY APPLN. INFO: GB 1998-12202 19980605; GB 1997-24725 19971121

ANSWER 6 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN L5

Conformation-dependent interaction of alpha-lactalbumin ΤI with model and biological membranes: A spin-label ESR study.

AB alpha-Lactalbumin (alpha-LA) is biosynthesized and stored at the smooth endoplasmic reticulum (ER), then transferred to the Golgi lumen when prolactin stimulation of lactose biosynthesis and secretion takes place. Because both environments are composed of membranes, it was of interest to examine the interactions of alpha-LA with relevant model and biological membranes. Using the ESR spin-labeled fatty acid analog 5-doxyl stearic acid, we found evidence reflecting the insertion of "acid-shocked" molten globule (MG) alpha-LA into lecithin or phosphatidylserine (PS) multi-lamellar vesicles. An additional apprx3 G immobilization was observed in the alpha-LA-lecithin sample versus the lipid alone. With PS, the increased immobilization was almost 6 G, reflecting an enhanced effect caused by strong electrostatic interactions between the positively charged protein with the negatively charged headgroup at pH 2.4. This was also reflected in the broadening of the PS:alpha-LA phase transition. Additionally, we have demonstrated that alpha-LA in its apo-form also shows similar insertion characteristics with both model and natural lipid membranes. Upon addition of calcium, the apo-form is released from the membrane as the Ca2+-bound protein.

ACCESSION NUMBER: 2004:237857 BIOSIS DOCUMENT NUMBER: PREV200400237871

TITLE: Conformation-dependent interaction of alpha-

lactalbumin with model and biological membranes: A

spin-label ESR study.

AUTHOR(S): Chaudhuri, Dipankar [Reprint Author]; Narayan, Mahesh;

Berliner, Lawrence J.

CORPORATE SOURCE: CD Strategies, 2250 Latham Street, Mountain View, CA,

94040, USA

berliner@du.edu

SOURCE: Protein Journal, (January 2004) Vol. 23, No. 1, pp. 95-101.

print.

ISSN: 1572-3887 (ISSN print).

DOCUMENT TYPE:

Article English

LANGUAGE: ENTRY DATE:

Entered STN: 28 Apr 2004

Last Updated on STN: 28 Apr 2004

L5 ANSWER 7 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Lipids as cofactors in protein folding: Stereo-specific lipid-protein

interactions are required to form HAMLET (human alpha-

lactalbumin made lethal to tumor cells).

AB Proteins can adjust their structure and function in response to shifting environments. Functional diversity is created not only by the sequence but by changes in tertiary structure. Here we present evidence that lipid cofactors may enable otherwise unstable protein folding variants to maintain their conformation and to form novel, biologically active complexes. We have identified unsaturated C18 fatty acids in the cis conformation as the cofactors that bind apo alpha-

lactalbumin and form HAMLET (human alpha-

lactalbumin made lethal to tumor cells). The complexes were formed on an ion exchange column, were stable in a molten globule-like conformation, and had attained the novel biological activity. The protein-fatty acid interaction was specific, as saturated C18 fatty acids, or unsaturated C18:ltrans conformers were unable to form complexes with apo alphalactalbumin, as were fatty acids with shorter or longer carbon chains. Unsaturated cis fatty acids other than C18:1:9cis were able to form stable complexes, but these were not active in the apoptosis assay. The results demonstrate that stereo-specific lipid-protein interactions

can stabilize partially unfolded conformations and form molecular

complexes with novel biological activity. The results offer a new mechanism for the functional diversity of proteins, by exploiting lipids

as essential, tissue-specific cofactors in this process.

ACCESSION NUMBER: 2004:53432 BIOSIS DOCUMENT NUMBER: PREV200400057124

TITLE: Lipids as cofactors in protein folding: Stereo-specific

lipid-protein interactions are required to form HAMLET

(human alpha-lactalbumin made lethal to

tumor cells).

AUTHOR(S): Svensson, Malin; Mossberg, Ann-Kristin; Pettersson, Jenny;

Linse, Sara; Svanborg, Catharina [Reprint Author]

CORPORATE SOURCE: Department of Microbiology, Immunology and Glycobiology

(MIG), Institute of Laboratory Medicine, Lund University,

Solvegatan 23, S-223 62, Lund, Sweden

Catharina.Svanborg@mig.lu.se

SOURCE: Protein Science, (December 2003) Vol. 12, No. 12, pp.

2805-2814. print. ISSN: 0961-8368.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 21 Jan 2004

Last Updated on STN: 21 Jan 2004

Search Forms	Refine Search
Search Results	
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Search History

DATE:	Wednesday, April 20.	2005	Printable Conv	Create Case
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<u>L13</u>	L12 and (EDTA)	5	<u>L13</u>
<u>L12</u>	L8 and (ion exchange)	83	<u>L12</u>
<u>L11</u>	11 and 17	. 3	<u>L11</u>
<u>L10</u>	17 and 16	1	<u>L10</u>
<u>L9</u>	L8 and l7	0	<u>L9</u>
<u>L8</u>	svensson.in.	813	<u>L8</u>
<u>L7</u>	hakansson.in.	127	<u>L7</u>
<u>L6</u>	svanborg.in.	5	<u>L6</u>
<u>L5</u>	L4 and (fatty acid or lipids)	109600	<u>L5</u>
<u>L4</u>	L3 and (molten globule-like state)	172400	<u>L4</u>
<u>L3</u>	L2 and (oligomeric form)	333723	<u>L3</u>
<u>L2</u>	alpha lactalbumin	369835	<u>L2</u>
<u>L1</u>	alpha lactalbumin	369835	<u>L1</u>

END OF SEARCH HISTORY

Hit List

Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

Search Results - Record(s) 1 through 5 of 5 returned.

1. Document ID: US 6746568 B1

L13: Entry 1 of 5 File: USPT Jun 8, 2004

US-PAT-NO: 6746568

DOCUMENT-IDENTIFIER: US 6746568 B1

TITLE: Treatment of filtrates from peroxide bleaching of pulp

DATE-ISSUED: June 8, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Terelius; Hans Uttran SE Olsson; Anette Helsingborg SE Nilsson; Margareta Helsingborg SE Svensson; Jessica Helsingborg SE Rampotas; Christos Helsingborg SE

US-CL-CURRENT: $\underline{162}/\underline{38}$; $\underline{162}/\underline{41}$, $\underline{162}/\underline{42}$, $\underline{162}/\underline{43}$, $\underline{162}/\underline{45}$, $\underline{162}/\underline{60}$, $\underline{162}/\underline{78}$, $\underline{162}/\underline{79}$

Full Title Cita	stion Front	Review Classification	in Date	Reference		Claims	KWMC E	Draim Desc Ima:
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2. Document ID: US 6670378 B2

L13: Entry 2 of 5 File: USPT Dec 30, 2003

US-PAT-NO: 6670378

DOCUMENT-IDENTIFIER: US 6670378 B2

** See image for <u>Certificate of Correction</u> **

TITLE: Method of treating Parkinson's disease

DATE-ISSUED: December 30, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Svensson; Kjell A. Portage MI

US-CL-CURRENT: <u>514/317</u>

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.Full	Title	Citation	Front	Review	Classification	Date	Reference		Claims	KWIC	Draw Desc	lma
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3. Document ID: US 6653325 B2

L13: Entry 3 of 5 File: USPT Nov 25, 2003

US-PAT-NO: 6653325

DOCUMENT-IDENTIFIER: US 6653325 B2

### ** See image for Certificate of Correction **

TITLE: Method of treating parkinson's disease

DATE-ISSUED: November 25, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Svensson; Kjell A. Portage MI

US-CL-CURRENT: 514/317

Full Title Citation Front	Review Classification	Date Reference		Claims KMC Draw Desc Time
			······································	
4. Document ID	: US 6290812 B1			
L13: Entry 4 of 5		File:	USPT	Sep 18, 2001

US-PAT-NO: 6290812

DOCUMENT-IDENTIFIER: US 6290812 B1

TITLE: Method for treating process water in connection with pulp bleaching

DATE-ISSUED: September 18, 2001

INVENTOR-INFORMATION:

CITY ZIP CODE COUNTRY STATE NAME Rampotas; Christos Helsingborg SE Helsingborg SE Svensson; Viveka Hansson; Jonny Bjuv SE Helsingborg SE Nilsson; Margareta

US-CL-CURRENT: 162/29; 162/189, 162/DIG.8, 210/723, 210/912, 210/928

Full   Title   Citation   Front   Review   Classification	n Date Reference	Claims KMC   Draw Desc   Ima
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5. Document ID: US 5866590 A		
L13: Entry 5 of 5	File: USPT	Feb 2, 1999

US-PAT-NO: 5866590

DOCUMENT-IDENTIFIER: US 5866590 A

TITLE: Pharmaceutical composition containing tiagabine hydrochloride and the process for

its preparation

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svensson: J.o slashed.rgen Ryhl	Frederikssund			DK
Nygaard; Lars	Valby			DK
Andersen; Tina Meinertz	Hoersholm			DK
Weibel; Helle	Hilleroed			DK
Hjorth; Thyge Borup	Farum			DK

US-CL-CURRENT: 514/326; 514/458, 514/474

Full   Title   Citation   Front   Review   Classification   Date   Ref	erence Claims	KMC Draw Desc Ima
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Display Format: CIT Change Format

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Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

**Search Results -** Record(s) 1 through 3 of 3 returned.

1. Document ID: US 6808930 B1

L11: Entry 1 of 3 File: USPT Oct 26, 2004

US-PAT-NO: 6808930

DOCUMENT-IDENTIFIER: US 6808930 B1

TITLE: Therapeutic agents

DATE-ISSUED: October 26, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Svanborg; Catharina Solvegatan 23, S-223 62 Lund SE

S-223 54 Lund SE

Hakansson; Per Anders

US-CL-CURRENT:  $\underline{436/64}$ ;  $\underline{424/1.37}$ ,  $\underline{424/1.53}$ ,  $\underline{424/1.65}$ ,  $\underline{424/1.69}$ ,  $\underline{424/130.1}$ ,  $\underline{424/134.1}$ ,  $\underline{424/135.1}$ ,  $\underline{424/135.1}$ ,  $\underline{424/183.1}$ ,  $\underline{424/9.1}$ ,  $\underline{424/9.2}$ ,  $\underline{436/63}$ ,  $\underline{530/365}$ ,  $\underline{530/366}$ ,  $\underline{530/402}$ 

2. Document ID: US 6681674 B2

L11: Entry 2 of 3 File: USPT Jan 27, 2004

US-PAT-NO: 6681674

DOCUMENT-IDENTIFIER: US 6681674 B2

TITLE: Band saw blade

DATE-ISSUED: January 27, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

<u>Hakansson;</u> William SE-662 36 Amal SE <u>Hakansson;</u> Bengt Emanuel SE-662 30 Amal SE

US-CL-CURRENT: 83/661; 83/788, 83/835, 83/846, 83/853

Full Title Citation Front Review Classification Date Reference Communication Draws Desc Ima

3. Document ID: US 6269792 B1

L11: Entry 3 of 3 File: USPT Aug 7, 2001

US-PAT-NO: 6269792

DOCUMENT-IDENTIFIER: US 6269792 B1

TITLE: Internal combustion engine with compressor function

DATE-ISSUED: August 7, 2001

INVENTOR-INFORMATION:

NAME CITY

Hakansson; Nils Olof

STATE

ZIP CODE

COUNTRY

Stenkullen

SE

US-CL-CURRENT: <u>123/322</u>

ull Title Citation Front Review	Classification   Date   Reference	Claims KWIC Draw Desc
Clear Generate Collection	on Print Fwd Refs Bkwd Re	fs Generate OACS
		fs Generate OACS
Clear Generate Collection Terms	on Print Fwd Refs Bkwd Re  Documents	fs Generate OACS

Change Format Display Format: CIT

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